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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/613,000

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Thomas Forest

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EXAMINER

CHERY, DADY

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/613,000

Applicant(s)

FOREST ET AL.

Examiner

Dady Chery

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. A program does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

2. limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,7,9,13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Fellman et al. (US Patent 6,246,702, hereinafter Fellman).

Regarding claims 1 and 9, Fellman discloses *one of a number (Fig.2, 100) of nodes (100) of a communication system (Fig. 2), the nodes (100) being connected to a communication medium (Fig.2, 1) for transmitting data among the nodes (100), the one node comprising:*

a communication controller (1000), across which the node is connected to the communication medium (1), the communication controller (1000) having a synchronized clock signal (Col. 10, lines 54 –66);

a bus guardian (Fig. 3) for controlling access of the communication controller to the communication medium (Col. 10,lines 12 – 21), the bus guardian (fig. 3) having an electronic circuit (1010) generating a bus guardian internal clock signal which is less accurate than said synchronized clock signal (Col. 11, lines 6 – 14), crystal oscillator provides less accurate signal than a normal clock. The bus guardian also having means (1002) for examining said synchronized clock signal using said internal clock (1010) signal; and means (1004,1006) for passing said synchronized clock signal to the examining means (Col. 10, lines 22 - 36).

Regarding claims 2 and 10, Fellman discloses *the communication controller has an additional clock signal and further comprising means for passing said additional clock signal to said bus guardian, wherein said examining means has means for monitoring said synchronized clock signal using said additional clock signal and means for monitoring said additional clock signal using said bus guardian internal clock signal*

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(Fig. 2 and fig. 3, Col. 10, lines 63 –Col. 11, lines 15). The clock of the controller (1000) sends additional signal and the link between the controller and the medium (1) is considered as the means for transmit the additional signal. The processor (1002) of the bus guardian is the means for monitoring the additional clock by using the bus guardian internal clock (1010).

Regarding claim 13-16, Fellman discloses computer readable medium including RAM and ROM for storing the computer program to execute the method of claim 9 (Fig. 2, and 3). Every computer has memory (RAM and ROM).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 3, 4-6, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellman in the view of Lahr et al. (US Patent 4,005,266 hereinafter Lehr).

Regarding claims 3, 4, 11 and 12, Fellman discloses a processor that monitors a clock signal (Fig. 3, Col. 10, lines 29 – Col. 11, lines 14) within a unowned phase (Fig. 8, 57) that is considered as tolerance window (Col. 19, lines 3 – 9) as described by the instant application.

Fellman fails to mention if the monitor means count the number of internal clock signals period during a configurable a number of additional clocks.

However, Lehr teaches a main counter and a secondary counter (Fig. 2, 30 and 35) that count the number of internal clock signals period during a configurable a number of additional clocks (Col. 10, lines 52 – Col. 11, lines 22). Which is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a counter to count the number of internal clock

signals period during a configurable a number of additional clocks for the purpose of determine the number of correction of a system cycles (Abstract).

Regarding claims 5 and 6, Fellman discloses a processor that monitors a clock signal (Fig. 3, Col. 10, lines 29 – Col. 11, lines 14) within a unowned phase (Fig. 8, 57) that is considered as tolerance window (Col. 19, lines 3 – 9) as described by the instant application.

Fellman fails to mention if the monitor means count the number of internal clock signals period during multiple number of additional clocks.

However, Lehr teaches a main counter and a secondary counter (Fig. 2, 30 and 35) that count the number of internal clock signals period during multiple a number of additional clocks because the counting is doing periodically (Col. 10, lines 52 – Col. 11, lines 22). Which is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a counter to count the number of internal clock signals period during a configurable a number of additional clocks for the purpose of determine the number of correction of a system cycles (Abstract).

Regarding claim 8, Fellman discloses an oscillator that generates the control signal (Col. 7, lines 11- 32). It is known in the art that the equivalent circuit for oscillator consists of resistor, capacitor and inductor in series and another capacitor in parallel.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a resonant circuit comprising of capacitance and resistance for the purpose of cancellation the capacitance effect of the circuit.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kopetz (US Patent 4,866,606) discloses a loosely coupled distributed computer system with node synchronization for precision in real time applications.

Willard et al. (US Patent 6,449,290) discloses a method and arrangements in a radio communication system.

Christopher Temple (Avoiding the babbling-idiot failure in time-triggered communication system, June 1998) discloses synchronization of node with a bus guardian.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dady Chery whose telephone number is 571-270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm ESt.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dady Chery 06/21/2007


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER